

Intentional Injury: Mortality and Hospitalizations

Publicly funded services to address Intentional Injury are described in Immunization Program CHILD Profile, Mental Health Services, and School-Based Health Centers. In addition, the DOH Injury Program addresses intentional injury.

Key Findings:

Mortality^b

- In 2003, there were 86 deaths due to intentional injury for Washington state residents ages 0-19 (48 suicides and 38 homicides), resulting in an intentional injury mortality rate of 5.1 per 100,000 children ages 0-19 (or 2.8 per 100,000 for suicides, and 2.2 per 100,000 for homicides).^{1,2}
- From 2001-2003, youth ages 15-19 had the highest intentional injury death rates (13.6 per 100,000) of all Washington children followed by infants (4.7 per 100,000).^{1,2}
- From 2001-2003, males 0-19 had intentional injury death rates over three times greater than females. Intentional injury death rates were higher in American Indian/Alaska Native and Black children compared to other races.^{1,2}
- Firearms were the most frequently used mechanism for intentional injury deaths, followed by suffocation, cutting/piercing, and poisoning.³
- Forty-two youth ages 15-19 committed suicide in 2003. The suicide rate for Washington youths ages 15-19 was 9.6 per 100,000, down from 12.6 per 100,000 in 1990.^{1,2}

Definitions:

Intentional injury deaths: Due to homicides and suicides.^a

Intentional injury hospitalizations: Those due to assault (ICD-9 codes E960-E969), or attempted suicide (ICD-9 codes E950-E959) as the primary E-code. The data source is the Washington State Comprehensive Hospital Abstract Reporting System (CHARS). Patients hospitalized more than once with the same diagnosis are counted as separate incidents.

- The Healthy People 2010 goals for all ages are to reduce suicides to no more than 5.0 per 100,000 population and homicides to no more than 3.0 per 100,000.⁵

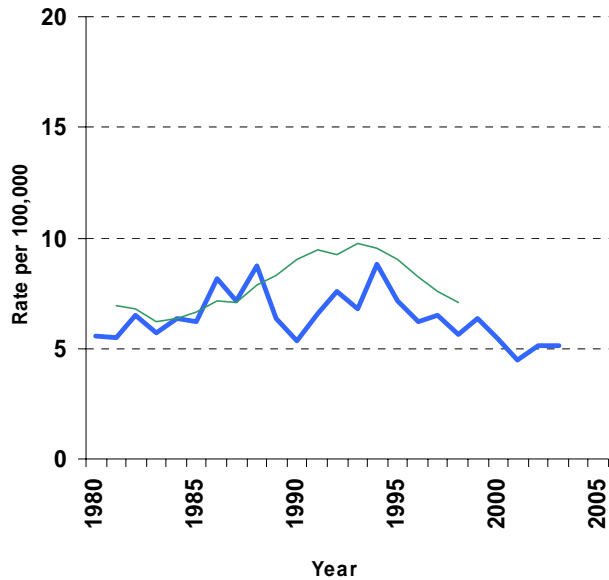
Hospitalizations

- In 2003, there were 688 nonfatal hospitalizations due to intentional injury for Washington state residents ages 0-19, for a rate of 40.6 per 100,000. This represents a 32% decline from the 1989 rate of 59.8 per 100,000.⁶
- In 2003, 370 Washington adolescents ages 15-19 (84.2 per 100,000) were hospitalized after a suicide attempt.
- The intentional injury hospitalization rates for 2001-2003 were highest in Washington children ages 15-19 years and in infants.⁶
- From 2001-2003, Washington females ages 0-19 had a significantly higher intentional injury hospitalization rate than males.⁶
- While the leading cause of intentional injury hospitalizations differ by age, for all Washington children ages 0-19 the most common causes for nonfatal intentional injury hospitalizations were poisoning, cutting/piercing, and struck by/against (which includes injuries caused by being struck by an object or person).⁶
- Urban and Mixed Urban areas have significantly higher intentional injury hospitalizations than less urban areas in the state.⁷

Mortality

Time Trend^{1,2}

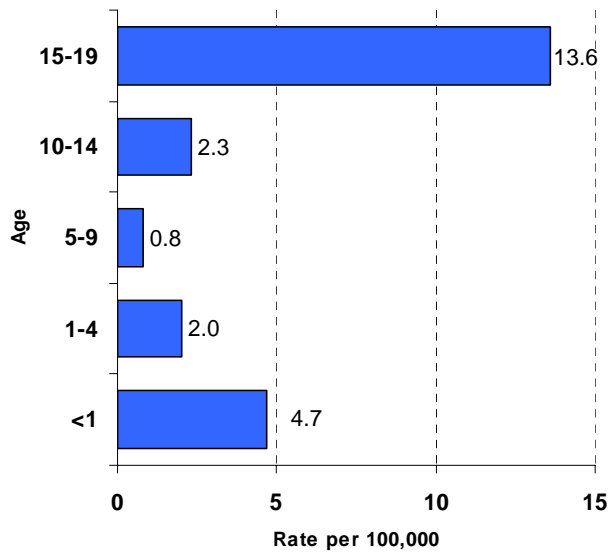
Intentional Injury Mortality Rate, Ages 0-19
WA, 1980-2003



— WA — US

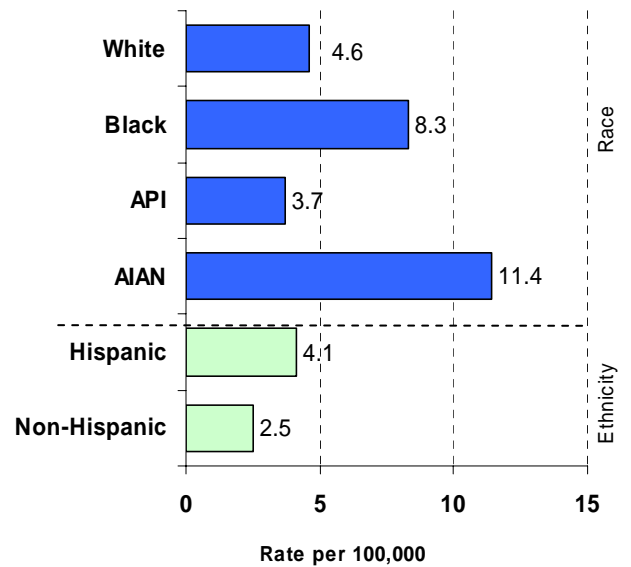
Age^{1,2}

Intentional Injury Mortality Rate
by Age Groups
Per 100,000, WA, 2001-2003



Race and Ethnicity^{1,2,c,d,e}

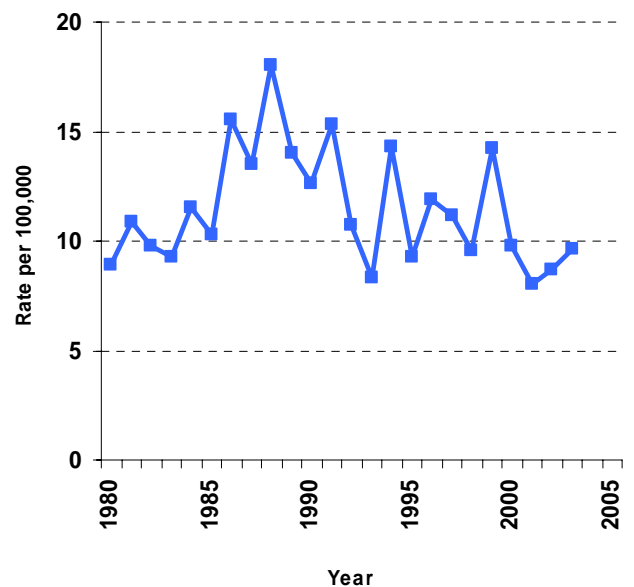
Intentional Mortality Rate, Ages 0-19
by Race/Ethnicity,
WA 2001-2003



Block Grant Measure:

Suicides: 15 to 19 year olds^{1,2}

Suicide Rate, Ages 15-19
WA, 1980-2003



Gender^{1,2}



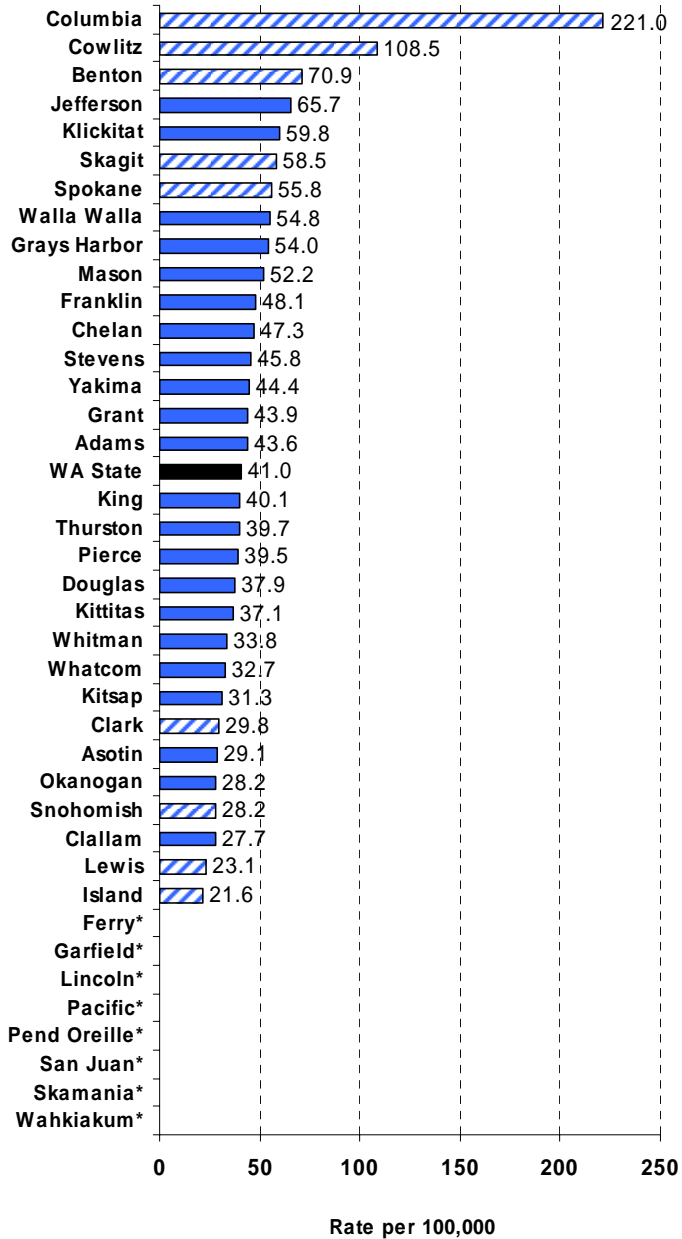
Leading Causes of Intentional Injury Deaths	
WA Children, Ages 0-19, 1999-2003 ³	
Rank	Causes
1st	Firearms (N=214)
2nd	Suffocation (N=82)
3rd	Cut/ Pierce (N=28)
4th	Poisoning (N=25)

Hospitalizations (Non-Fatal Injuries) ^g

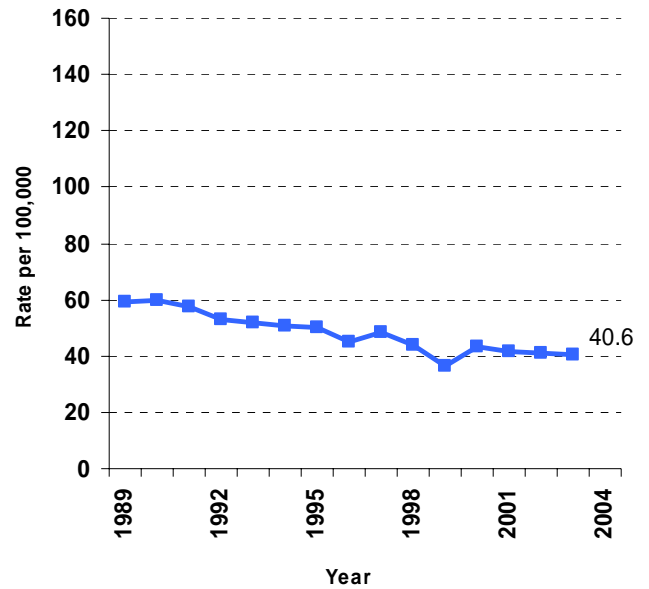
County ^{6,f,g}

Time Trend ^{6,g}

**Nonfatal Intentional Injury
Hospitalization Rate
By County
Per 100,000, WA, 2001-2003**

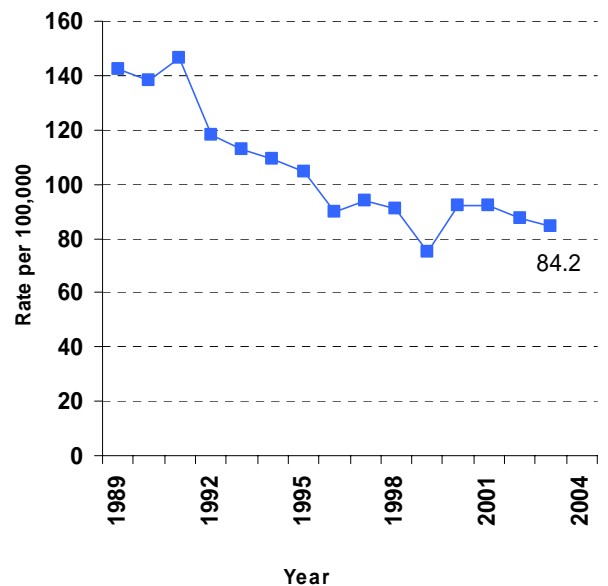


**Intentional Injury Hospitalization Rate,
Ages 0-19
Per 100,000, WA, 1989-2003**



Suicide Attempt Hospitalizations: 15 to 19 Year Olds ^{6,g}

**Nonfatal Suicide Attempt Hospitalizations
Ages 15-19
Per 100,000, WA, 1989-2003**

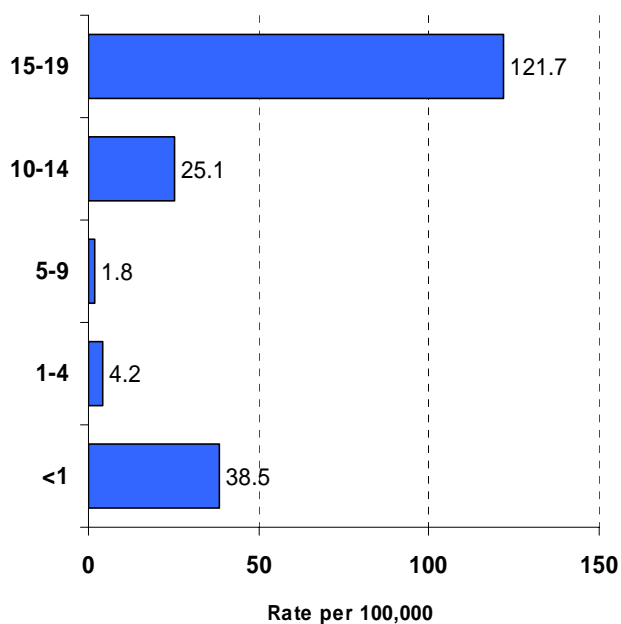


*County rates not calculated if less than 5 events

Significantly different from state
based on 95% confidence intervals

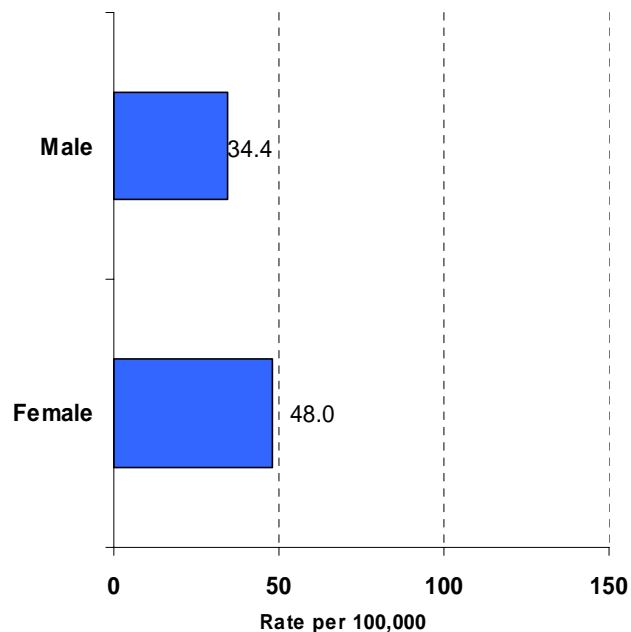
Age^{6,g}

**Intentional Injury Hospitalization Rates
By Age
Per 100,000, WA, 2001-2003**



Gender^{6,g}

**Intentional Injury Hospitalization Rates By
Gender
Per 100,000, WA, 2001-2003**



<i>Leading Causes of Nonfatal Intentional Injury Hospitalizations 1999-2003, WA Children Ages 0-19 by Age</i> ^{6,g}				
Causes				
Rank	Ages <10	Ages 10-14	Ages 15-19	Ages 0-19
1 st	Firearms	Poisoning	Poisoning	Poisoning
2 nd	Poisoning	Cut/Pierce	Struck by or against	Struck by or against
3 rd	Cut/Pierce	Struck by or against	Cut/Pierce	Cut/Pierce

Data Sources

1. Washington State death certificate data: Vital Statistics 2003, Washington State Department of Health, Center for Health Statistics, March 2005.
2. Analysis Software: Public health – Seattle & King County, Epidemiology, Planning & Evaluation, Software for Public health Assessment (VistaPHw), 1991-.
3. Injury Prevention and Safety Program, Washington State Department of Health:
http://www.doh.wa.gov/cfh/Injury/data_tables/table_directory.htm
4. Data from the Washington State Child Death Review Database, MCH Assessment Section, Washington State Department of Health, 2001-2003.
5. Healthy People 2010: Understanding and Improving Health, US Department of Health and Human Services, Washington DC. US Government Printing Office, 2000.
6. Washington State Department of Health, Center for Health Statistics, Comprehensive Hospital Abstract Reporting System (CHARS - August 2005 release). Data compiled by Washington State Injury and Violence Prevention Program. Available at:
http://www.doh.wa.gov/cfh/Injury/data_tables/WA/nonfatal/NonfatalbyAge_2000-2004.pdf
7. Washington State Department of Health, Office of Community and Rural Health, November 2005.

Endnotes

- a. For years after 1999 on, intentional self-harm (suicide) includes ICD-10 codes X60-X84 and Y87.0. Assault (homicide) includes ICD-10 codes X85-Y09 and Y87.1. For years 1980-1998, intentional self-harm includes ICD-9 codes E950-E959, and assaults include ICD-9 codes E960-E969. Comparability ratio (used to enable comparison of ICD-9 and ICD-10 coded data) for intentional injury mortality was 1.00 (SE 0.0005 for suicides and 0.0006 for homicides)
- b. County specific rates for Intentional Injury Mortality are not provided because of the small number of deaths.
- c. Population denominators for non-Hispanics are estimated by subtracting the number of Hispanics from the total population and may include unknowns.
- d. AIAN – American Indian/Alaska Native
- e. API – Asian or Pacific Islander
- f. Significance was determined based on 95% Confidence Intervals.
- g. Graphs reflect non-fatal injury hospitalizations